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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,071	05/04/2001	Herman P. Benecke	22094(1)CIP	8151
24116	7590 03/13/2003			
BATTELLE MEMORIAL INSTITUTE			EXAMINER	
505 KING AVENUE			SZEKELY, PETER A	
COLUMBUS	OH 43201-2693		SZERELI, FEIER A	
			ART UNIT	PAPER NUMBER
			1714	
			DATE MAILED: 03/13/2003	
				21
				7

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
. Office Action Summary		09/849,071	BENECKE ET AL.				
		Examiner	Art Unit				
		Peter Szekely	1714				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status 1)⊠	Responsive to communication(s) filed on 04 /	May 2001 .					
2a)□	•	is action is non-final.					
3)	Since this application is in condition for allowa	ance except for formal matters, pr	rosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	Claim(s) <u>16,17,19,21-25 and 27-30</u> is/are allowed.						
6)🖂	☑ Claim(s) <u>1-5,9,11,18,20 and 26</u> is/are rejected.						
7)⊠	Claim(s) <u>6-8,10 and 12-15</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9) The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Application/Control Number: 09/849,071

Art Unit: 1714

#### **DETAILED ACTION**

#### Claim Objections

1. Claim 20 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 11. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 2, 11,18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 4. DOP is an abbreviation. All abbreviations have to be explained in the claims. In claims 11 and 20, "R" has no antecedent basis in claim 1. The claims are identical, therefore they are duplicate claims. In claim 18, "R" has to be epoxidized.

# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Page 3

Application/Control Number: 09/849,071

Art Unit: 1714

6. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Chung et al. 4,486,561.

- 7. Chung et al. disclose methyl epoxy soyate (Vikoflex 7010,commercially available from Viking Chemical) in column 7, lines 15-54. Applicants' claim is not novel.
- 8. Claims 1-5, 11 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Moffitt 5,030,511.
- 9. Moffitt teaches a polyvinyl vinylidene-vinyl chloride copolymer, where the major portion of the vinylidene chloride copolymer is vinyl chloride (column 4, lines 38-45) and butyl ester of epoxidized linseed oil (Vikoflex 9040) in column 9, lines 52-55.

#### Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 09/849,071

Art Unit: 1714

- 12. Claims 1-5, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duvall et al. 6,326,518.
- Duvall et al. recite PVC and its copolymers in column 4, lines 1-37, stabilizers and their concentration in column 27, lines 47-62 and epoxidized glycidyl soyate in column 28, lines 25-26. The disclosure does not mention DOP. It would have been obvious to one having ordinary skill in the art; at the time the invention was made, to select epoxidized glycidyl soyate from a list of equivalents.
- 14. Claims 1-5, 9, 11, 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duvall et al. 6,326,518, in view of Chung et al. 4,486,561.
- 15. Duvall et al. has been discussed already in great detail. Chung et al. besides listing the epoxy plasticizers in column 7, lines 15-54, explicitly state that "the epoxy plasticizers used pursuant to this invention represent epoxy oils and esters of the type used as plasticizer-stabilizers for polyvinyl chloride resins". Thus it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to use the plasticizers of Chung et al., in the composition of Duvall et al., since they are customarily employed in PVC compositions.

# Allowable Subject Matter

- 16. Claims 6-8, 10 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 17 Claims 16, 17, 19, 21-25 and 27-30 are allowed.

Application/Control Number: 09/849,071

Art Unit: 1714

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Peter Szekely Primary Examiner Art Unit 1714

P.S. March 7, 2003